



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|------------------------|----------------------------------|------------------|
| 10/784,248 | 02/24/2004 | Thi Ngoc Phuong Nguyen | OP-092000394 | 1198 |
| 46103 | 7590 | 03/02/2007 | | |
| HDSL 4331 STEVENS BATTLE LANE FAIRFAX, VA 22033 | | | EXAMINER FLORY, CHRISTOPHER A | |
| | | | ART UNIT 3762 | PAPER NUMBER |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/02/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

ED

| | | | |
|------------------------------|---|--|--|
| Office Action Summary | Application No. 10/784,248 | Applicant(s) NGUYEN, THI NGOC PHUONG | |
| | Examiner Christopher A. Flory | Art Unit 3762 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minogue et al. (US Patent Publication 2002/0133195, hereinafter Minogue'195).

Regarding claim 1, Minogue'195 shows an electrical impulse apparatus (ABSTRACT; Figure 2) comprising a microprocessor (Fig. 2, signal generator 28 including microprocessor; paragraph [158]); an impulse generator to generate pulsed signals (Fig. 26, pulse generators 90 and 91; paragraphs [2], [132], [158]); a switch for inputting operation (Fig. 4, control buttons 62; paragraph [147]); a pad with one surface attachable to the skin (Fig. 2, belt 40; or Figs 7-9, adhesive layers 67 and 68 on electrode pad 65; paragraph [142]); and two electrodes mounted on the pad (Fig. 2, electrical contacts 45 and 46 with mounted adhesive electrode foil pads 65); wherein the Minogue'195 device is disclosed to select from multiple therapies and sessions by varying magnitude, pulse duration, and inter-pulse width (paragraph [147]).

Regarding the clause that the invention be used for facial massage, such a recitation of intended use does not distinguish over the prior art so long as the prior art satisfies all the claimed structural limitations and is capable of performing said intended use. The electronic stimulating device of Minogue'195 is capable of being used for

facial massage, and therefore the claims of the instant application do not distinguish over the Minogue'195 device. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987)

Further regarding claim 1, Minogue'194 discloses the invention substantially as claimed, but does not explicitly disclose the specific frequency and time values of the pulse width and stimulation sessions. It would have been obvious to one having ordinary skill in the art at the time of the invention to use the specific frequency and time values of the pulse width and stimulation sessions as claimed in the instant invention, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges (*In re Aller*, 105 USPQ 233) or optimum value of a result effective variable (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)) involves only routine skill in the art.

Alternatively, it is noted that clause reading "thereby an electro-muscle stimulation is applied to facial tissue...and a tenth session with 5Hz and 30 μ s for continuous two minutes," is a recitation of functional language contained within an apparatus claim. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). Therefore, because Minogue'195 discloses the structure of the instant application and is inherently capable of delivering stimulation pulses of the claimed frequency, pulse width, and duration (paragraphs [53] through [57] and [88]

through [92]) the invention of the instant application does not distinguish over the prior art.

Regarding claim 3, Minogue'195 shows a housing (Fig. 4, signal generator housing 28) with the microprocessor and impulse generator inside (paragraph [158]).

Regarding claim 5, Minogue'195 shows two conductive lines connected between the impulse generator and each electrode (Fig. 6, main and secondary cables 59 and 60, which connect electrodes to the signal generator 28 through electrical contacts 45 and 46 by means of contact jack plug 57).

Regarding claim 7, Minogue'195 discloses the apparatus wherein the switch includes two buttons (Fig. 2, buttons 62) to increase and decrease the strength of the pulse generation (paragraphs [147] and [148]).

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartelt et al. (US Patent 5,069,211) in view of Barker (US Patent 3,709,228, hereinafter Barker'228), or in view of Cormier et al. (US Patent 5,995,869), or in view of Applicant's admission of prior art (hereinafter Admission).

Regarding claim 1, Bartelt et al. discloses an electrical impulse device (ABSTRACT) comprising a microprocessor (Fig. 1, microprocessor control unit 18); an impulse generator controlled by the microprocessor to generate pulsed signals (column 3, line 60 through column 4, line 11); a switch for inputting operation (Fig. 1, switches 25, 26 and 28); and two electrodes (Fig. 1, electrodes 32 and 33 or 35 and 36; column 3, lines 55-60; column 9, lines 20-38).

Bartelt et al. discloses the instant invention substantially as claimed except that it does not expressly state that the electrodes be mounted on a pad with one surface attachable to the facial skin. In the same field of endeavor, Barker'228 teaches two electrode discs (Fig. 3, electrodes 40'' and 40''') mounted on a pad (rigid resinous plastic insulative body 46) for engagement simultaneously with spaced portions of a user's face (column 4, line 15 through column 5, line 6). It is noted that the electrodes are considered to be attached to the facial skin because they maintain constant electrical contact and are stated to remain in the set positions unless forcibly bent to other positions by a different user (column 5, lines 54-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of the Bartelt et al. patent with the attachable electrode pad configuration of the Barker'228 device to provide Bartelt et al. with the same advantages of maintaining constant electrical contact, repeatable use without reconfiguration, and the ability for the structure to fit any facial contour (column 1, lines 63-65). (Motivation to combine provided by Barker'228, column 1, lines 63-65 and column 5, lines 54-66).

Alternatively, in the same problem solving area, Cormier et al. teaches mounting two electrodes (Fig. 1, electrodes 22 and 24) on a pad (lower housing 20) with one surface attachable to the facial skin (body-contacting side 36 of skin-compatible adhesive 30) for the purpose of assuring that the device remains in place on the body during normal user activity while permitting reasonable removal after the predetermined wear period (column 10, lines 55-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Bartelt et al.

Art Unit: 3762

with the adhesive electrode pad of the Cormier et al. device to provide the Bartelt et al. system with a means for assuring that the device remain in place on the body during normal user activity while permitting reasonable removal after the predetermined wear period (motivation to combine provided by Cormier et al., column 10, lines 55-64).

Still alternatively, Applicant discloses in Admission that well-known electro-muscle stimulation technology utilizes a conductive pad or electrode to externally apply a current to a muscle or muscle group and thereby cause them to contract (page 3, lines 15-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Bartelt et al. system with a conductive pad as disclosed in Admission to provide the Bartelt et al. device the advantage of causing a desired muscle or group of muscles to contract (motivation to combine provided by Admission, page 3, lines 15-21).

Regarding the clause that the invention be used for facial massage, such a recitation of intended use does not distinguish over the prior art so long as the prior art satisfies all the claimed structural limitations and is capable of performing said intended use. The electronic stimulating device of Bartelt et al. is capable of being used for facial massage, and therefore the claims of the instant application do not distinguish over the Bartelt et al. device. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Further regarding claim 1, Bartelt et al. discloses the invention substantially as claimed, but does not explicitly disclose the specific frequency and time values of the pulse width and stimulation sessions. It would have been obvious to one having ordinary skill in the art at the time of the invention to use the specific frequency and time

values of the pulse width and stimulation sessions as claimed in the instant invention, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges (*In re Aller*, 105 USPQ 233) or optimum value of a result effective variable (*In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980)) involves only routine skill in the art.

Alternatively, it is noted that clause reading “thereby an electro-muscle stimulation is applied to facial tissue...and a tenth session with 5Hz and 30 μ s for continuous two minutes,” is a recitation of functional language contained within an apparatus claim. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). Therefore, because Bartelt et al. discloses the structure of the instant application and is inherently capable of delivering stimulation pulses of the claimed frequency, pulse width, and duration (column 4, line 30 through column 5, line 13; column 9, lines 30-38) the invention of the instant application does not distinguish over the prior art.

Regarding claim 2, Bartelt et al. discloses a continuous thirty-minute operation cycle (Fig. 6; column 4, lines 16-61).

Regarding claim 3, a housing is an inherent component of any medical device such as the one disclosed in Bartelt et al. which is intended for portable use or use on multiple patients. Further, Bartelt et al. discloses that switches 25 and 26 are attached

to the microprocessor and externally actuable (column 3, lines 36-41). Therefore, the instant invention does not distinguish over the prior art of Bartelt et al.

Further regarding claim 3 and regarding claim 4, Bartelt et al. discloses the instant invention substantially as claimed except for the limitation that the pad is located directly on the housing. Cormier et al. teaches a device with a housing (Fig. 1, upper housing 16 and lower housing 20) with the microprocessor and impulse generator inside (circuit board assembly 18), and buttons (12) on the surface thereof; wherein the pad is located directly on the housing (lower housing 20 with electrodes 22 and 24 and adhesive backing 30 are considered to be the 'pad') for the purpose of adhering the device to the patient's body surface (column 10, lines 55-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Bartelt et al. device with the housing and pad configuration of Cormier et al. for the same advantage of being able to adhere the device directly to the patient's body (motivation to combine provided by Cormier et al., column 10, lines 55-64).

Regarding claim 5, Bartelt et al. discloses the instant invention substantially as claimed except for expressly stating the limitation that the electrodes are connected to the impulse generator by two conductive lines. It is well known in the art that a conductive line is an inherent feature of any electrode being connected to a pulse generator or microprocessor. Applicant is directed to an example of prior art that expressly states this claim limitation--Barker'228 discloses the use of two flexible insulated conductive wires (Fig. 1, wires 42") for connecting a pair of spaced co-planar electrodes to the processor. Therefore, because a conductive line connecting an

electrode to an impulse generator is an inherent feature of all such systems, this claim limitation does not distinguish the instant application over the prior art.

Regarding claim 6, Bartelt et al. discloses a light emitting device connected to the microprocessor (Fig. 1, intensity display 23, battery warning indicator 30) for indicating an operation status (column 5, lines 13-33).

Regarding claims 7-9, Bartelt et al. discloses the apparatus wherein the switch includes two buttons to increase and decrease the strength of pulse generation (Fig. 1, on/increase switch 25 and off/decrease switch 26); wherein the strength increasing button is a power-on switch at start and the strength decreasing button is a power-off switch (column 12, lines 36-45).

Response to Arguments

4. Applicant's arguments, see paragraphs 2-3 of page 6, filed 25 September 2006, with respect to the objection to the specification and claims have been fully considered and are persuasive. The objections to the specification and claims have been withdrawn.

5. Applicant's arguments, see paragraph 4 of page 6, filed 25 September 2006, with respect to the §112 rejection of claim 3 have been fully considered and are persuasive. The §112 rejection of claim 3 has been withdrawn. It should be noted that the limitation of "buttons" is not in the scope of the rejection, but the phrasing of "*the* buttons." A recitation of --a pair of buttons-- or --at least two buttons-- would have been sufficient to satisfy the statute of 35 U.S.C. §112.

6. Applicant's arguments with respect to claims 1, 3, 5 and 7 as being rejected under 35 U.S.C. §102(b) as anticipated by Minogue'195 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed 25 September 2006 regarding the rejection of claims 1-9 under 35 U.S.C. §103 as being unpatentable over Bartelt'211 in view of various supporting art have been fully considered but they are not persuasive. Claims 1-9 stand rejected under 35 U.S.C. §103 for the arguments made of record restated above.

Applicant argues that Bartelt, Barker and Cormier fail to teach the generation of pulsed signals having a certain waveform. Examiner takes the position that all signals have a certain waveform, especially when, as disclosed in Bartelt, Barker, or Cormier, the delivered waveform have specific values of magnitude, pulse width and duration.

Applicant further argues that the claimed ranges of frequency and time duration structurally distinguish the instant invention over the prior art. Examiner respectfully takes the stance that such ranges do not constitute a structural difference, but rather a difference in intended use or function.

Applicant also argues that the instant application yields the unexpected result of improving muscle tone and strength to protect against the aging process. Examiner maintains the original position that both the Bartelt and Barker references teach of stimulating the musculature of the face to increase muscle tone and lead to improvement of the facial appearance. Thus, such a limitation does not constitute an unexpected result that would distinguish over the combination of prior art used.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Flory whose telephone number is (571) 272-6820. The examiner can normally be reached on M - F 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher A. Flory
22 February 2007


George Manuel
Primary Examiner